

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Please cancel claims 1-7, 9-12, 14-18, 26-30, 32-47, 49-52, and 55-57, and add new claims 58-62, and amend the claims as follows:

Claims 1-18 (cancelled)

19. (currently amended) An isolated polypeptide encoded by ~~the~~ a nucleic acid molecule of claim 4 comprising a nucleotide sequence selected from the group consisting of:

a) SEQ ID NO:3, or a fragment thereof which encodes a functional domain of said peptide;

b) SEQ ID NO:4, or a fragment thereof which encodes a functional domain of said peptide;

c) a sequence at least 90% homologous to SEQ ID NO:3 or SEQ ID NO:4, or a fragment thereof which encodes a functional domain of said polypeptide;

d) a sequence that encodes a polypeptide comprising SEQ ID NO:5, or a fragment thereof, said fragment comprising a functional domain of said polypeptide; and

e) a sequence that encodes a polypeptide comprising an amino acid sequence at least 90% homologous to SEQ ID NO:5 or a fragment thereof, said fragment comprising a functional domain of said polypeptide;

wherein said polypeptide is a tankyrase homolog or fragment thereof having at least one biological property of tankyrase.

20. (original) The polypeptide of claim 19, which comprises SEQ ID NO:5.

21. (currently amended) The polypeptide of claim 19, which comprises an amino acid sequence at least 90% homologous to SEQ ID NO:5.

22. (original) The polypeptide of claim 21, which comprises at least one conservative amino acid substitution compared to SEQ ID NO:5.

23. (currently amended) The polypeptide of claim 19, which comprises a fragment of SEQ ID NO:5, said fragment comprising a functional domain of said polypeptide.

Claims 24-47 (cancelled)

48. (previously presented) A composition comprising a polypeptide of claim 19 and an acceptable carrier or diluent.

Claims 49-52 (cancelled)

53. (previously presented) A kit comprising a polypeptide of claim 19.

54. (previously presented) The kit of claim 53 further comprising instructions.

Claims 55-57 (cancelled)

58. (new) The polypeptide of claim 19, wherein said property is the ability to ADP-ribosylate a suitable protein target.

59. (new) The polypeptide of claim 58, wherein said suitable protein target is TRF1.

60. (new) The polypeptide of claim 19, wherein said property is ANK binding.

61. (new) The polypeptide of claim 21, which comprises an amino acid sequence at least 95% homologous to SEQ ID NO:5.

62. (new) An isolated or purified tankyrase homolog protein comprising the amino acid sequence of SEQ ID NO:5.